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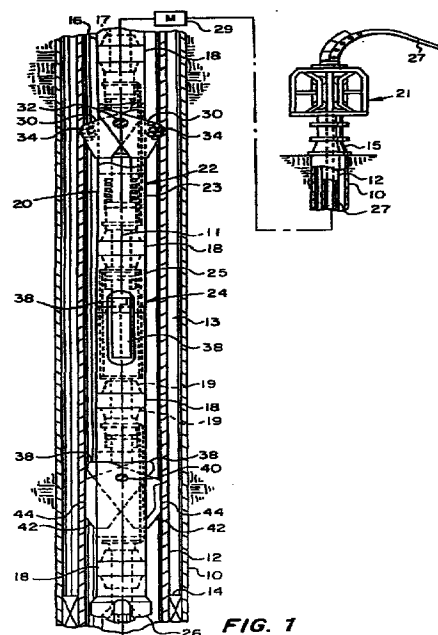
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(54) **Well conduit cutting and milling apparatus and method**

(57) A well conduit cutting and milling apparatus (22) conveyable into and out of a well on coilable tubing (27) using a tubing injection unit (21). The apparatus includes tubing or casing cutting arms (30) which are radially extendable and retractable with respect to a cylindrical support body by pressure fluid operated pistons (64, 70). The apparatus is made up of multiple end-to-end connected units including one which supports interchangeable cutting and milling arms (30) and units which have radially extensible and retractable stabilizing arms (38) which engage the inner wall of the tubing (12) or casing (10) to centralize and stabilize the apparatus during operation. The cutter and milling arms (30) are modified for milling away a section of tubing (12) by moving the apparatus in an upward or out of the well direction. The cutting elements (34) are preferably cylindrical hard metal members which are supported on the arms (30) for cutting away an end face of the tubing (12) in a tangential direction of movement.



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EUROPEAN SEARCH REPORT

Application Number
EP 98 11 2950

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	EP 0 278 730 A (TRI-STATE OIL TOOLS INDUSTRIES INC.) 17 August 1988 * column 3, line 6 - column 4, line 4 * * column 4, line 15 - line 23 * * column 4, line 34 - line 56 * -----	1	E21B29/00 E21B10/32
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			E21B
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	18 January 1999	Rampelmann, K	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 98 11 2950

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